Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1. (withdrawn) A method for producing a vaccine containing an immunogenic determinant, comprising the steps of:
- a) exposing extra-cellular pathogenic organisms to stress-inducing stimuli which would induce the production of stress protein/antigenic peptide fragment complexes;
 - b) extracting the endogenous stress-induced products from the treated cells; and
 - c) using the extracted products as the immunogenic determinant in the preparation of the vaccine composition.
- 2. (withdrawn) The method as claimed in claim 1, wherein the active ingredient of the immunogenic determinant predominantly comprises one or more shock protein/antigenic peptide fragment complexes.
- 3. (withdrawn) The method as claimed in claim 1, wherein the stress-inducing stimulus is heat.
- 4. (withdrawn) The method as claimed in claim 3, wherein the pathogenic organism is heated to from 5 to 8°C above the normal temperature for cultivation of the organism.
- 5. (withdrawn) The method as claimed in claim 1, wherein the pathogenic organism is an extra-cellular procaryotic or protozoan species.
- 6. (withdrawn) The method as claimed in claim 1, wherein the pathogenic organism is a bacterial, protozoal or fungal species.

- 7. (withdrawn) The method as claimed in claim 1, wherein the immunogenic determinant is a mixture of heat shock protein/antigenic peptide fragment complexes.
- 8. (withdrawn) The method as claimed in claim 1, wherein the extra-cellular pathogenic organism has been modified to induce or enhance the induction of the synthesis of stress proteins.
- 9. (withdrawn) The method as claimed in claim 1, wherein the method is carried out in vitro.
- 10. (currently amended) A composition for inducing an immune response to a pathogenic bacteria, the composition comprising one or more <u>endogenous</u> complexes produced in-situ from the pathogenic bacteria, <u>which complexes are formed</u> between an induced heat shock protein <u>derived from the pathogenic bacteria</u> and an antigenic peptide fragment <u>which is also</u> derived from the pathogenic bacteria wherein production of the induced heat shock protein results from the exposure of the pathogenic bacteria to a stress-inducing heat shock stimulus, and wherein the formation of the <u>endogenous</u> complex between the induced heat shock protein and the antigenic peptide fragment is accomplished in an ATP-dependent reaction.
- 11. (currently amended) A composition for inducing an immune response to a pathogenic bacteria, produced by the method comprising the steps of:

exposing a pathogenic bacteria to a stress-inducing heat shock stimulus which induces the production of <u>endogenous</u> heat shock protein/antigenic peptide fragment complexes <u>formed</u> in situ by said bacteria, wherein the formation of the <u>endogenous</u> in-situ complexes between the induced heat shock protein and the antigenic peptide fragment is accomplished in an ATP-dependent reaction;

extracting the <u>endogenous</u> complexes from said bacteria to provide a composition for inducing an immune response to the pathogenic bacteria comprising said extracted complexes.

- 12. (previously presented) The composition as claimed in claim 10, wherein the composition comprises an adjuvant for the one or more complexes.
- 13. (previously presented) The composition as claimed in claim 10, which is an aqueous composition wherein the composition comprises an aqueous carrier.
- 14. (previously presented) A method for inducing an immune response in an animal against infection by a pathogenic bacteria comprising administering a pharmaceutically acceptable quantity of a composition for inducing an immune response as claimed in claim 10 sufficient to elicit an immune response in the animal to said pathogenic bacteria.
- 15. (withdrawn) A method for eliciting an immune response from an animal to infection by an intra-cellular pathogenic organism the method comprising:

administering a vaccine containing an immunogenic determinant, the immunogenic determinant being a stress protein/antigenic peptide fragment complex produced in situ from the intra-cellular pathogen, the synthesis of the complex being induced by external stress stimuli or by genetic modification of the pathogen so as to render its synthesis constitutive.

- 16. (canceled).
- 17. (previously presented) The composition according to claim 10, wherein said complexes are obtained by exposing the pathogenic bacteria to heat shock.

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18. (canceled).

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